PART #: NETB12PPDC

User Manual and Installation Guide

The NetIrrigate® PumpProxy™ DC (Part # NETB12PPDC) is designed for remotely monitoring and shutting down engine driven pumps with 12VDC ignition circuits. For three phase and single phase electrically driven pumps, please refer to the user manual and installation guide for part # NETB12PPAC.

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Revision History

Rev	Date	Description
A	May 8th, 2013	Initial release of manual.

Customer Support:
Email: support@netirrigate.com
Phone: (800) 961-9549 x2
www.netirrigate.com

Business Address:
Net Irrigate, LLC
4201 E 3RD ST
Bloomington, IN 47401

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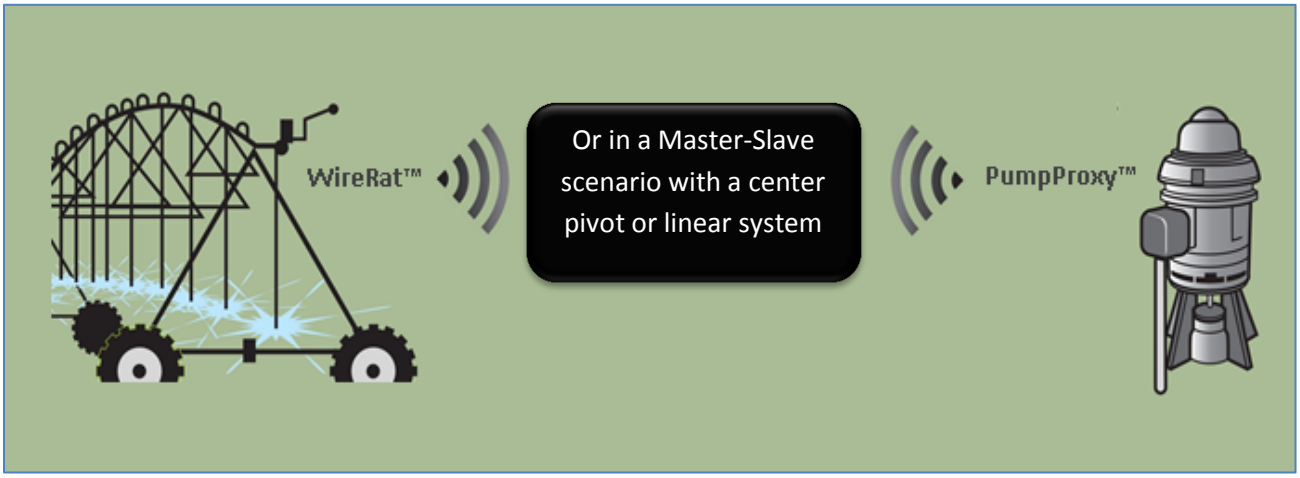
Applications

Part # NETB12PPDC (branded the PumpProxy®) is specifically designed to remotely monitor and shut down engine driven irrigation pumps. With a PumpProxy® installed on an engine driven irrigation pump, you can:

- Receive notifications via voice call, text message, or email when your engine fails or is started up
- Monitor your engine from the NetIrrigate® website or a convenient iPhone app
- Shutdown your engine from your phone
- Replace underground "kill wires" from your center pivot irrigation panel to its associated pump (requires compliment part # NETB12WR) such that the pump's engine automatically stops when your pivot stops.

Use as a stand-alone engine monitoring unit



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PumpProxy® Overview

Connection Cable

The NETB12PPDC is equipped with a five conductor PVC jacketed connection cord containing five wires. The description of each conductor is as follows:

Part #: NETB12PPDC	
Red	+12VDC
Black	-0VDC (GND)
White	Relay Common
Blue	NC Relay Contact
Green	NO Relay Contact

Engine On/Off Notifications

The NETB12PPDC triggers notifications when off-to-on and on-to-off transitions occur. For example, when 12VDC is supplied to the red and black conductors, the unit can be configured to send a voice, text, or email notification that "*YourEngineName has powered up.*"

Conversely, because the NETB12PPDC is equipped with a rechargeable lithium polymer battery, when 12VDC stops being supplied to the red and black conductors, the unit can be configured to send a notification that "*YourEngineName has shut down.*"

The unit is equipped with a "debounce" timer so small interruptions in power do not trigger notifications. When a transition from on-to-off occurs, the unit must be off for at least 30 seconds before a notification will be sent. Likewise, the unit must have been ON for at least 5 minutes, to ensure the backup battery is adequately charged to support a "powered down" notification.

Remote Engine Shutdown

If the NETB12PPDC is wired correctly, it may be used to remotely stop an engine driven irrigation pump. When your security profile is properly configured on www.netirrigate.com, stopping the pump can simply be achieved by utilizing the NetIrrigate® remote shutdown line or utilizing the PumpProxy™ iPhone app available in the Apple app store.

Murphy Tattletale® Annuciators and Magnetic Switches

Because most engines in irrigation applications are equipped with Murphy switches, the NETB12PPDC is designed to be wired in conjunction with these switches. Net Irrigate provides wiring diagrams for most standard model annunciators in this manual. If your engine is not equipped with a Murphy switch, please contact customer support at (800) 961-9549 for alternative wiring instructions.

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Installation

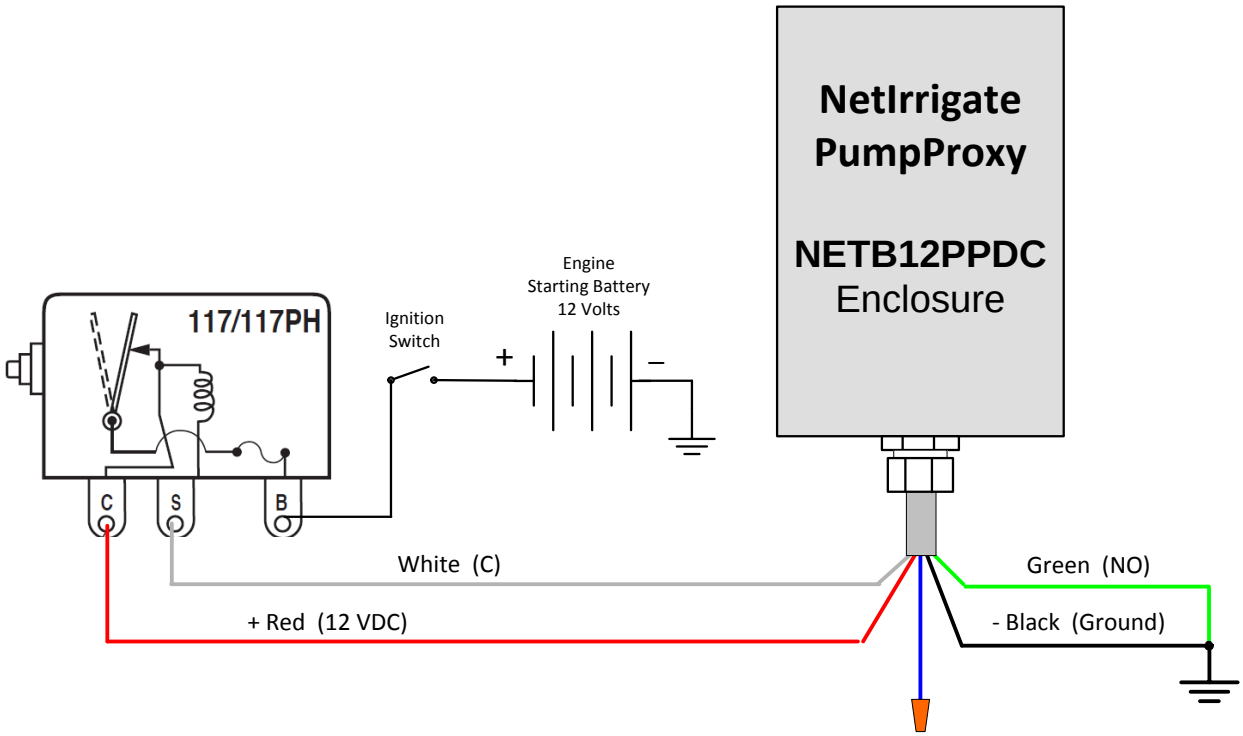
Identifying the Device Id

All NETB12 products are uniquely identified by a 6 digit serial number which is barcoded on both the packaging carton and the physical unit. Net Irrigate refers to this number as the “Device Id”.

Mounting

To minimize vibration, Net Irrigate recommends mounting the PumpProxy® unit on a metallic stake. The magnets on the back of the NETB12PPDC make mounting easy. Alternatively, the PumpProxy® should be mounted to a location on the engine where vibration is minimal and the PumpProxy® is free of metallic obstructions.

Murphy 117/117PH Wiring



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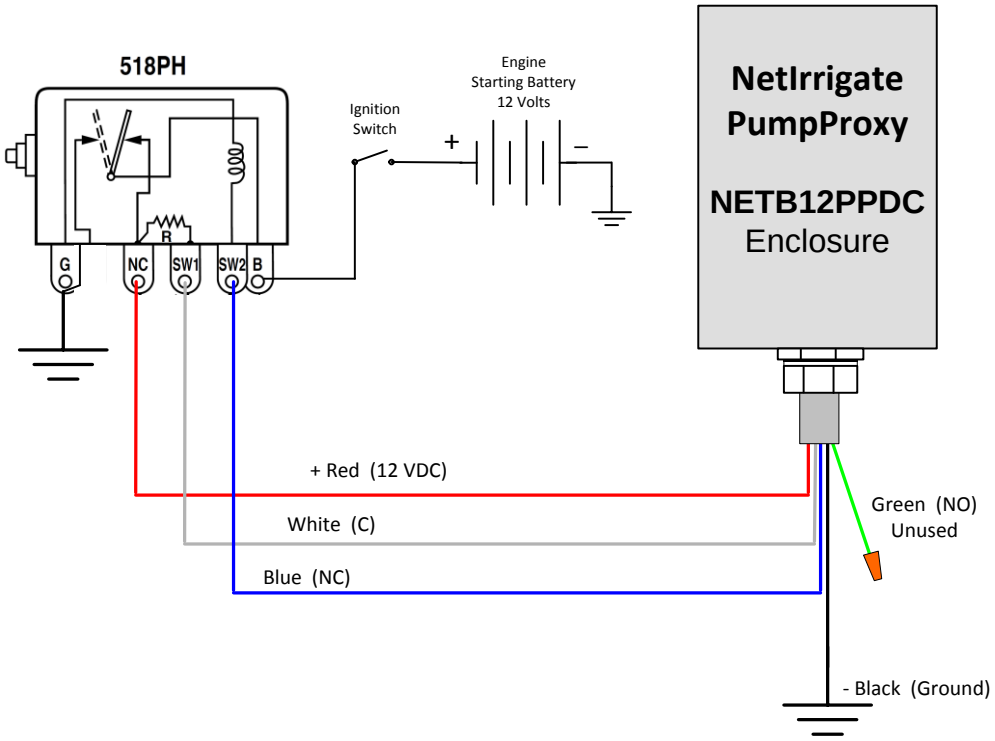
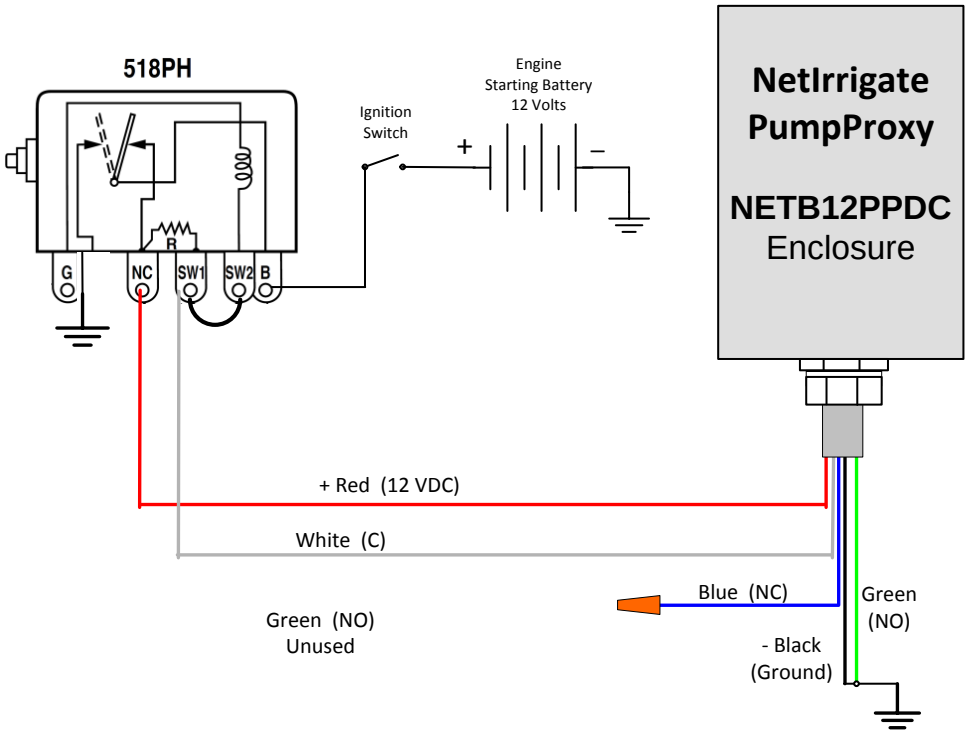
Murphy 518PH/518APH/518E with "Closed Loop™



Murphy 518PH/518APH/518E without "Closed Loop™"



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Configuration

Configuring the NETB12PPDC can be achieved through one of three possible ways:

1. Login to www.netirrigate.com. If you do not yet have a username and password for your dealership, please contact customer support at (800) 961-9549 or email support@netirrigate.com. For details on how to utilize the dealer portal on www.netirrigate.com, please review the document entitled "Web Portal User Guide".

2. Login to the PumpProxy™ iPhone App. PumpProxy® is available for download in the Apple App Store. You may use the same login information as you would use to login to www.netirrigate.com. *Instructions to configure a PumpProxy® using this method are included in this manual.*

3. If you do not have access to a computer or the PumpProxy™ iPhone App, just contact customer support at (800) 961-9549 and an agent will be happy to setup the customer, site, and notification recipients for you.

Customer Creation

If you are a dealer or reseller setting up a PumpProxy® for a customer, a customer account should be created first to if it does not yet exist.

Step 1	Step 2	Step 3
Login to the PumpProxy® app using your iPhone	**Tab the command icon in the upper right and then tab "Add New Customer"**	**Add the customer details and tap "Save Customer" when finished**

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Site Creation

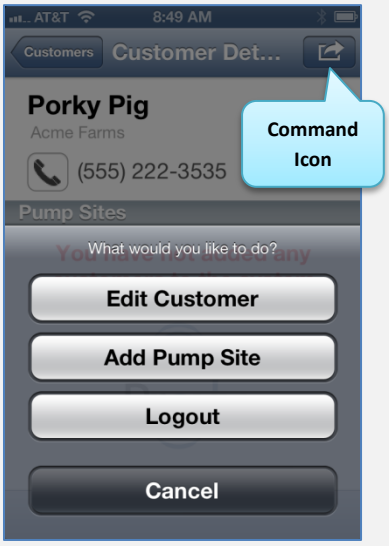
Once the customer is created, you now need to create a Pumping Site for that customer and link the NETB12PPDC to that particular site. Follow the steps below to create a pumping site linked to the appropriate serial number of your NETB12PPDC.

Step 1

Tab the customer name for which you are creating the PumpProxy® enabled site for.

Step 2

Tab the command icon in the upper right, and then tab "Add Pump Site"



Step 3

Net Irrigate stores the GPS Coordinates of all Irrigation and Pumping Sites. Select OK to automatically have the GPS coordinates saved.

Step 4

Use the form to enter details about the pump site.

Step 5

Be sure to enter the correct Device Id. The Device Id can be found on the barcode of the NETB12PPDC. Tap "Add Pump Site" when finished.

Step 6

The site should now appear underneath the customer you created.

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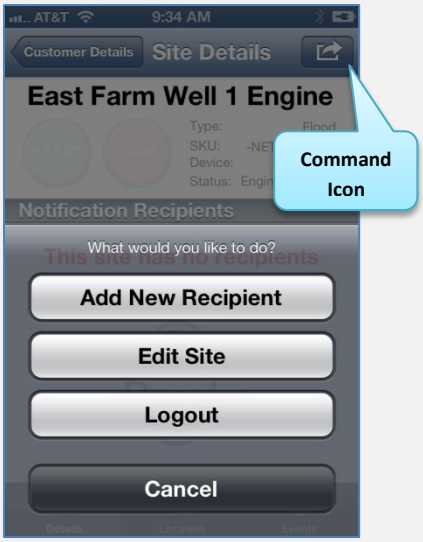
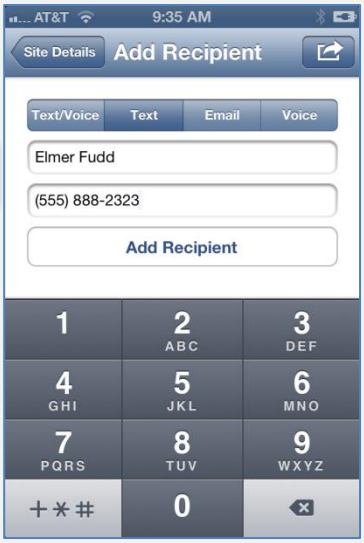
Notification Recipients

Notification recipients are the people who are contacted (either via voice call, text message, or email) when an engine starts or stops. Up to ten notification recipients can be configured per pumps site. Notification recipients can be easily enabled or disabled by using the web portal, iPhone app, or simply by calling customer support at (800) 961-9549. The iPhone app is the simplest way to create and manage notification recipients.

Adding a Notification Recipient

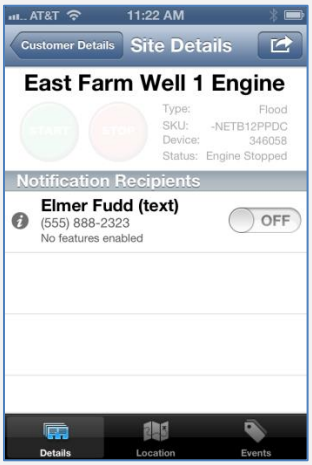
Step 1	Step 2	Step 3
Tap the pump site name from the customer site list.	**The screen below should appear. Once it appears, tab the command icon. Then click the "Add New Recipient" button.**	**Select the type of notification you would like to configure and enter the contact information of the recipient. Tap "Add Recipient" when finished.**

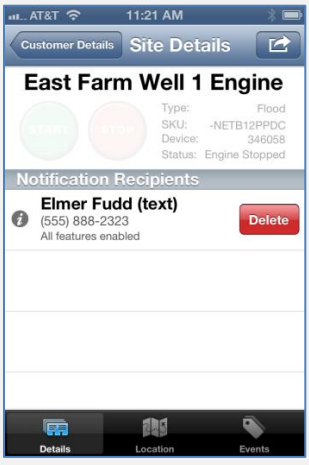




Suppressing Notifications

Turning Off a Recipient	Deleting a Recipient
To suspend notifications for the selecting pump site, simple tap the toggle switch next to the recipient name to "Off". This action will disable all notifications for that recipient.	If you accidently added a recipient to the site in error, simply swipe to the right over the recipient name. The delete button should automatically appear.





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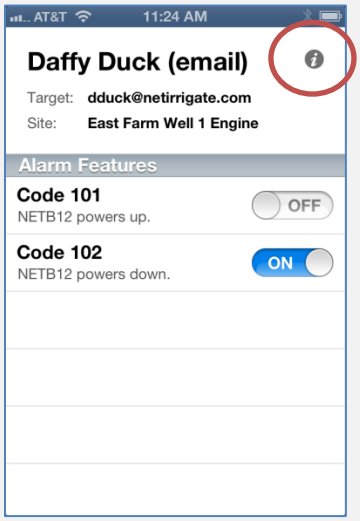
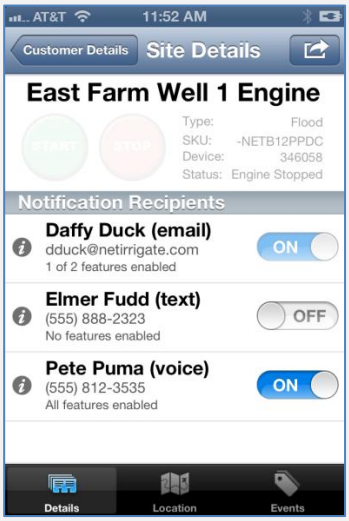
Directing Notifications

The PumpProxy™ allows you to configure which types of events the recipient should receive. For example, you might want only certain people to know when the pump starts and other people to know when the pump stops. Configuring these settings is easy with the mobile application.

Step 1	Step 2	Step 3
Tap the information icon to the left of the recipient name.	**The screen below should appear. In the example below, Daffy Duck will only receive notifications when the engine stops running. When finished, tap the information icon again.**	**The notification recipient screen should update indicating the Daddy Duck only has 1 of 2 notification features enabled.**





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Testing Procedures

Before testing notification services, at least one notification recipient should be configured for the site in question. If this has not been done, please see previous section **Error! Not a valid bookmark self-reference..**

Testing Power-Up Notifications

If the wiring schemes are adhered to, a "*NetIrrigateSiteName has powered up*" notification should occur within three minutes after the engine is started. If a power-up notification is not received, contact customer support at (800) 961-9549 to ensure the unit is registered on the network.

Testing Power Failure Notifications

Providing the engine has run for at least 4 minutes (to ensure backup battery is adequately charged), stop the engine. Within 3 minutes, you should receive a "*NetIrrigateSiteName has powered down*" notification. If a power-down notification is not received, contact customer support at (800) 961-9549.

Testing Remote Shutdown

Remotely shutting down the engine can be accomplished via three ways:

- Using NetIrrigate® Remote Shutdown Line by calling (800) 961-9549 x7
- Using the Site Status page on the NetIrrigate® web portal
- Using the PumpProxy™ Mobile App

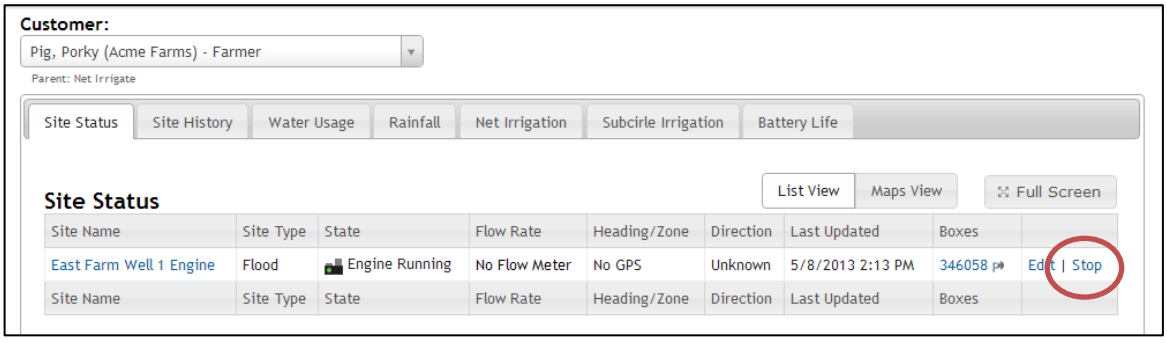
All remote shut down functionally uses a combination of account and caller id security to identify your list of PumpProxy™ equipped sites available for remote control. To enable your phone to initiate remote shutdown calls, make sure your phone number exists and is enabled within the Remote Access tab in the NetIrrigate® web portal.

Remote Shutdown Line

To initiate a remote shutdown call, simply dial (800) 961-9549 and the select extension 7. The automated system will read off a list of your pumps available for remote shutdown. Follow the voice prompts and your pump should shut down within two minutes.

Site Status Page

An engine driven pump can be shut down directly from the NetIrrigate® web portal. Simply click the "Stop" link for the site you wish to shut down.



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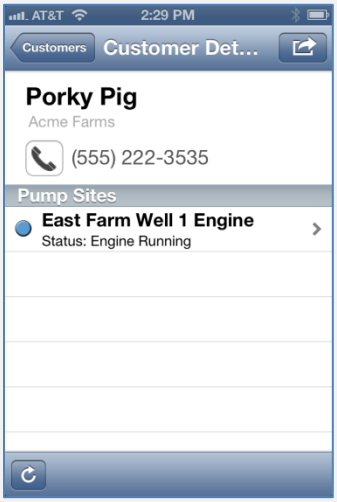
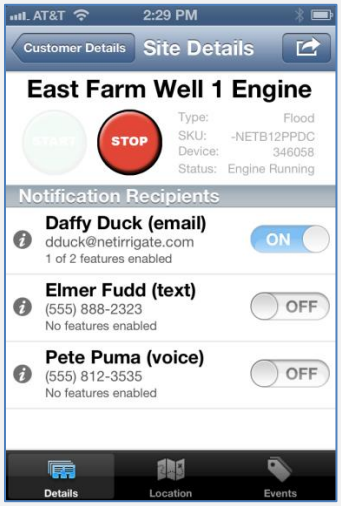
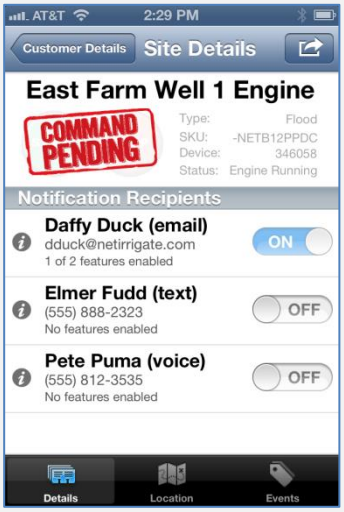
iPhone App

To shut down an engine driven pump from the PumpProxy® iPhone app, follow the steps below:

Step 1	Step 2	Step 3
Tap on the site name of the engine you wish to shut down.	**Tap the red stop button.**	**It will take about 90 seconds for the remote shutdown command to affect your engine.**
		

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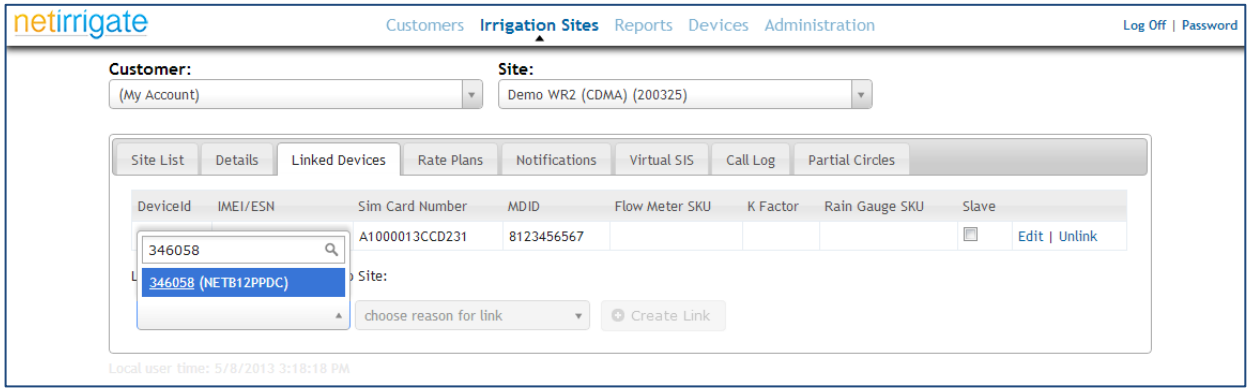
Setting Up a Master-Slave Relationship with a Pivot

If the NETB12PPDC will be used in conjunction with a center pivot irrigation system equipped with a NetIrrigate® WireRat™, it is important to properly configure the association in the NetIrrigate® web portal.

When the NETB12PPDC is configured in a master-slave relationship with a pivot, the WireRat® enabled pivot can automatically shut down the engine when the pivot stops walking. To configure this relationship, follow the steps outlined below:

1. Navigate to the "Linked Devices" tab within the Irrigation Sites section of the web portal and select the site you want to create the strictly slave relationship for. It is assumed the WireRat® has already been linked to this site.
2. In the "Link a Net Irrigate Telemetry Box to Site" drop down list, enter the Device Id of the NETB12PPDC you want to be the slave. Then click the "Create Link" button.



3. After you click the "Create Link" button, an entirely new irrigation site will automatically be created and the appropriate pivot to engine notifications will also automatically be created.

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